

Table SI. Definition of squamous cell carcinoma, drugs and comorbidities

Disease or drug	Definition
Cutaneous squamous cell carcinoma	ICD10-codes: C44 <i>or</i> C00 <i>and</i> ICD-O/3: 80701 <i>or</i> 80703 <i>or</i> 72850 <i>or</i> 80702 <i>or</i> 80812
Organ transplant	ICD10-codes: Z94.0,1,2,3,4,6,8,9
HIV	B20-24; Z21
Alcohol-associated comorbidity	ICD10-codes: F10; G31.2; G62.1; G72.1; I42.6; K70.0-4,9; K86.0 <i>and/or</i> ATC-code starting with N07BB
Smoking-associated comorbidity	ICD10-codes: J42-J44 <i>and/or</i> ATC-code starting with N07BA
Actinic keratosis	ICD10-code: L57.0
Crohn's disease	ICD10-code: K50.0,1,8,9
Diabetes	ICD10-codes: E10-E14 <i>and/or</i> ATC-code starting with A10
Liver disease	ICD10-codes: B15.9; B16.9; B17.1,8; B18.0-B18.2; B19.9; D13.4; D37.6; K70.1; K71.0,1,2,5,9; K72.0,1,9; K73.0,2,9; K74.6; K75.0,3,4,9; K76.0,8,9; O26.6; O26.8E; Q44.6; R16.0; R74.0; R93.2; S36.1; S36.10; S36.11; T86.4
Peptic ulcer (gastric and duodenal ulcer)	ICD10-codes: K25.0-9; K26.0-9
Kidney-associated disease	ICD10-codes: I12.0,9; I13.1,2; N17.0,1,2,8,9; N18.2,3,4,5,9; N19.9; N99.0; O90.4; P96.0
Rheumatoid arthritis	ICD10-codes: M05.0,2,3,8,9; M06.0,1,2,3,4,8,9
Psoriasis	ICD10-code: L40
Psoriatic arthritis	ICD10-codes: M07.0,1,2,3; L40.5
Immunosuppressive drugs other than methotrexate	ATC code starting with L04A (not L04AX03)
Ciclosporin	ATC code: L04AD01
Acitretin	ATC code: D05BB02
Methotrexate	ATC codes: L04AX03 <i>and/or</i> L01BA01
Azathioprine	ATC code: L04AX01
Tumour necrosis factor- α inhibitor	ATC code starting with L04AB
Interleukin pathway inhibitor	ATC code starting with L04AC

Any of the listed International Classification of Diseases, Tenth Revision (ICD-10) codes relating to the respective comorbidity classes in the outpatient register or inpatient register in the period 2001 to the index date in the respective comorbidity class were sufficient to be considered having that specific comorbidity. The index date was in the period 2010 to 2016.

The ICD-10 codes were obtained from the Swedish inpatient and outpatient registry in the period 2001 to the index date. If a patient had dispensed any drug starting with the Anatomical Therapeutic Chemical (ATC)-codes N07BB, N07BA or A10, the patient was considered to have an alcohol-associated comorbidity, smoking-associated comorbidity or diabetes, respectively.

ICD-O/3: International Classification of Diseases for Oncology, third edition.